

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/013444

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 2, 5, 6 as originally filed/furnished
- pages* 1, 3, 4 received by this Authority on 12.10.2005 with telefax
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1, 2 received by this Authority on 12.10.2005 with telefax
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/1 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1, 2</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims <u>1, 2</u>	YES
		Claims _____	NO
	Industrial applicability (IA)	Claims <u>1, 2</u>	YES
		Claims _____	NO
2.	Citations and explanations (Rule 70.7)		
	1	This report makes reference to the following documents:	
		D1: EP 0 568 579 A (ASEA BROWN BOVERI AG) 10 November 1993 (1993-11-10)	
		D2: FR 2 628 994 A (VIVES CHARLES) 29 September 1989 (1989-09-29)	
		D3: WO 03/028925 A (SMS DEMAG AKTIENGESELLSCHAFT; EBERWEIN, KLAUS- PETER) 10 April 2003 (2003-04-10)	
	2	Novelty and inventive step, PCT Article 33(2)	
		D1 is regarded as the prior art and discloses a continuous casting mold in which permanent magnets (15b) are attached to the mold (11) (figure 1) in order to influence the flow of the liquid metal.	
		D1 offers two alternative solutions for varying the field strength:	
		- The magnets themselves can be slid into slots in the water chamber (claim 7, column 6, lines 39-57), or	

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- displaceable core elements can be inserted into the magnets (claim 7, column 6, line 58 to column 7, line 6).

Furthermore, D1 indicates that the permanent magnets are arranged in or near the water chamber (14) (column 6, lines 15ff.).

In D1, the permanent magnets are attached to the mold so as to be adjacent thereto or adjoining therewith.

Therefore, D1 also describes all of the characterizing features of the preamble of claim 1.

D1 describes and shows only translational movements of the permanent magnets.

Therefore, the pivotable adjusting means according to the characterizing part of claim 1 are novel.

Consequently, the problem of providing means for varying the field strength of the permanent magnets is solved in a different manner. The rotation causes the field strength to be additionally reduced in comparison to a translational movement, thereby rendering it easier to remove the magnets.

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	<p>Although in D3 electromagnets are applied to the mold in a pivoting motion, in this case, the magnets and the rotation device or applying device are not attached to the mold, owing to the weight issue during oscillation.</p> <p>Although according to D2 the magnets are rotated, it is not in order to adjust the field strength.</p> <p>Therefore none of the additionally cited documents renders it obvious to use pivotable adjusting means according to claim 1.</p> <p>3. Additional observations</p> <p>After the amendment of the claims, the pivoting motion is not merely a preferred embodiment. Therefore the word "preferably" on page 4, line 29 should be deleted when the application enters a regional phase, as should the embodiment of the rotatable spindles (line 30).</p>